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 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.

 09/014,341
 01/27/98
 INVIE
 J
 53929USA3A

IM62/0418

STEPHEN W. BUCKINGHAM 3M OFFICE OF INTELLECTUAL PROPERTY COUNSEL PO BOX 33427 ST PAUL MN 55133-3427 EXAMINER NAKARANI, D

PAPER NUMBER

ART UNIT

1773

**DATE MAILED:** 04/18/00

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

Application No. 09/014,341

Applicant(s)

Invie et al

## Office Action Summary

Examiner

D. S. Nakarani

Group Art Unit 1773

⊠ Responsive to communication(s) filed on <u>Jan 19, 2000</u>	
☐ This action is <b>FINAL</b> .	
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to expis longer, from the mailing date of this communication. Failure to re application to become abandoned. (35 U.S.C. § 133). Extensions of 37 CFR 1.136(a).	spond within the period for response will cause the
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
	is/are allowed.
	is/are rejected.
☐ Claim(s)	is/are objected to.
☐ Claims	are subject to restriction or election requirement.
Application Papers	
☐ See the attached Notice of Draftsperson's Patent Drawing Rev	view, PTO-948.
☐ The drawing(s) filed on is/are objected to	o by the Examiner.
☐ The proposed drawing correction, filed on	_ is _approved _disapproved.
$\square$ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).	
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been	
☐ received.	
received in Application No. (Series Code/Serial Number)	
received in this national stage application from the International Bureau (PCT Rule 17.2(a)).	
*Certified copies not received:	
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).	
Attachment(s)	
⊠ Notice of References Cited, PTO-892             —	
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).	
☐ Interview Summary, PTO-413	•
□ Notice of Draftsperson's Patent Drawing Review, PTO-948	
☐ Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE FOLLOWING PAGES	

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Art Unit: 1773

- (1) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- (2) Claims 1-38 and 40-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 8-11, the phrase "wherein  $R^1$  includes one or more substituents .... functional groups" renders claims indefinite and confusing since  $R^1$  is defined as being a divalent alkylane group ( $C_nH_{2n}$ ), arylene ( $C_6H_4$ ) or combination thereof. When alkylene group, arylene group or their combination substituted with recited substituents are not considered as alkylene group, arylene group or their combination. Also the phrase "wherein  $R^1$  optionally includes one or more halides" cannot be understood because the term "halide" means any compound containing halogen what kind of halides are included in  $R^1$ ? Applicants are trying to claim divalent alkylene group or arylene group substituted with halogen?

Line 11, the phrase "Y is a halide" should be changed to --Y is a halogen--.

Claim 9, line 5, the phrase "n is about 1 to about 4" should read -- integer n is about 1 to about 4-- or--n is 1 to 4--.

Lines 6-7, the Examiner is unable to understand phrases" oxygen-substituted perfluoroalkyl group" and "oxygen-substituted perfluoroalkyl group" and "oxygen-substituted perfluoroalkoxy group". Applicants are requested to provide structure of "oxygen-substituted perfluoro-alkyl group" and of "oxygen-substituted perfluoro alkoxy group.

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Claim 13, line 7, the phrase "P" optionally.... and halides" renders claim confusing and indefinite. The R¹ is defined as divalent alkylene group, arylene group, or combination thereof. When alkylene group or arylene group or their combinations substituted with recited substituents are not considered as alkylene group, arylene group or their combination. Further, substituent "halides" also renders claim indefinite because the term "halides" means halogen compounds. How one can substitute recited divalent R¹ group with halogen compounds? Clarifications requested.

Line 8, the phrase "Y is a halide" renders claim indefinite since term "halide" indicate halogen compound and not halogen. The rejection may overcome by changing said phrase to the phrase -- Y is a halogen--.

In claim 15 lines 7-9; claim 32, lines 7-9. Claim 40, lines 8-10. Claim 41, lines 8-10; claim 42, lines 7-9. Claim 43, lines 7-9; and in claim 44 lines 7-9, the phrases "R¹ includes one or more ---- one or more halides" and "Y is a halide" renders claim indefinite for the reasons stated above for claims 1 and 13.

(3) Claims 1-38 and 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Ochiai et al (EP 0749021 A2 and U.S. Patent 5081192 to Tatemoto) for the reasons of record set forth in paragraph 5 of the Office Action mailed September 9, 1999 (Paper No. 9).

Further applicants are requested to note that U.S. Patent 5,081,192 to Tatemoto has been incorporated by reference in EP0749021A2 (page 6 lines 9-10).

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Ochiai et al do not disclose addition of alkyl perfluoroalkyl ether. However the silane compounds are prepared using alkyl perfluoroalkyl ether (Tatemoto col. 3 line 39 to col. 4 line 10 and Example 1). Therefore statistically some of alkyl perfluoroalkyl ether is present in Ochiai et al's silane compound unless shown otherwise.

(4) Claim 39 is allowed.

(5) Applicant's arguments filed January 19, 2000 have been fully considered but they are not persuasive. Applicants' mainly argue that Ochiai et al's silane compound does not have R<sup>1</sup> of present invention containing hetero atoms, functional groups, and one or more halogen.

These arguments are unpersuasive because the claimed invention is not limited to the argued R<sup>1</sup> linking groups.

(6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is (703) 308-2413. The examiner can normally be reached on Tuesday-Friday from 7:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Paul J. Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718 or 305-3601.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

D. Nakarani/vr

D. S. NAKARANI PRIMARY EXAMINER

04-12-00